Lone Star College-Tomball infuses GRIT to strengthen mindset capabilities and to increase persistence and career readiness.
Key findings

• Correlations between GRIT scores and Lone Star KPIs offer evidence that higher GRIT scores are associated with better performance.

• Preliminary data show slightly higher rates of successful course completion among the “With GRIT” students than those in classes without additional GRIT instruction.

• Individual educators reported improvements in engagement, persistence, and achievement.

Setting

Lone Star College-Tomball (LSC-T) serves 9,000 students each semester, conferring associate’s degrees and certifications for work in high-demand industries. Lone Star College-Tomball is deeply committed to student success and credential completion. Lone Star College-Tomball is part of the Lone Star College System; collectively, the Lone Star Colleges contribute $3.1 billion to the Houston area economy with higher student incomes and increased business productivity.*

*lonestar.edu/economic-impact.htm

Challenges and goals

To counteract declining enrollments and less-than-satisfactory performance on district KPIs, LSC-T adopted a strategic focus around GRIT™ as a means to better prepare students in their pursuit of academic, career, and life aspirations.

Dr. Lee Ann Nutt, Lone Star Tomball’s President, considers GRIT to be an essential factor in student success. Dr. Nutt, with the support of faculty and staff, embarked on a “GRIT, Growth, Greatness” initiative to enhance GRIT-related methods and to measure their impact on student engagement, performance, persistence, and goal attainment.

Dr. Nutt asserts, “I may be an unusual college president to state that college is ‘optional,’ but my intent is to shift the focus from institution-focused concepts like ‘retention’ toward creating an intentional learning community where students acquire the skills to meet their needs and the needs of their community. Learning about GRIT — how essential it is to career and life success — galvanized us. We want to be on the leading edge of expanding the completion agenda beyond policies and process to what matters most—people. We think GRIT can help us meet our goals, and we’re excited to work hard and measure our progress.”

Following a period of study and consideration, LSC-T faculty and administrators determined to gather evidence of GRIT’s impact on student success.
Lone Star College-Tomball partnered with Pearson to answer key questions:

- Are higher GRIT scores associated with KPIs like course completion, course load, and re-enrollment?
- To what extent does GRIT increase over one academic term?
- How does an educator’s more intensive infusion of GRIT impact student results?
- How does exposure to GRIT in multiple classes and over time impact KPIs like GPA and completion?

This case study explores preliminary quantitative and qualitative data, documents the LSC-T implementation, and describes key lessons learned and next steps.

**Implementation**

**For the Fall 2015 impact study:**

All LSC-T students were invited to take the GRIT™ Gauge twice — at the start and end of term. Students in the Student Success course were required to take the GRIT™ Gauge.

Faculty teaching “With GRIT,” including all Student Success course faculty, were asked to infuse GRIT by, at a minimum, showing the 15-minute GRIT Overview video and by “Grittifying” at least one assignment. “With GRIT” faculty were free to go beyond the minimum and infuse GRIT as intensively as they wished. The “With GRIT” classes served as the experimental group.

“No Additional GRIT” faculty were asked to have students complete the GRIT Gauge but otherwise conducted classes in standard fashion — these classes served as the control group.

**The instructor perspective**

Among the faculty who voluntarily went beyond the minimum “With GRIT” guidelines is Latoya Lewis. Believing that learning gains are amplified when students and instructors adopt the same beliefs and behaviors around growth mindset and GRIT, Lewis embraced GRIT and worked to infuse GRIT methodology throughout her course assignments and teaching approach.

“When I began learning about GRIT, I wasn’t sure how GRIT could be developed. I know now that GRIT is teachable and can be strengthened,” says Lewis.

She continues, “No one has a GRIT score of zero. We are all gritty to some degree, and in my classes we work together to develop and strengthen our levels of GRIT.”
“Culture is important,” Lewis asserts. “I work hard to create an atmosphere of trust in my classes, and I allow students to see that I too struggle. I intentionally model GRIT for students; I challenge myself, and I challenge them in each interaction and with every assignment.”

Lewis infused GRIT in every aspect of her Fall 2015 online Student Success Course by intentionally modeling GRIT for students and adapting assignments to explicitly develop students’ GRIT. Students did not merely watch the GRIT Overview video; they completed a customized Notes document that asked students to consider the components of GRIT and identify the role for each component in their own lives and work. Lewis “grittified” four major assignments (Campus Resources Investigation, Path to Success Analysis Paper, Career Exploration Research Project, and Weekly Schedule). For each assignment, Lewis required students to complete a thorough GRIT analysis, including a Reflection writing assignment. She encouraged students to step outside their comfort zone with each assignment and try to master a new application or method. For example, as part of the Career Exploration Research Project, Lewis asked students to develop a creative resume with a different application like Prezi. Lewis mirrored this challenge herself by seeking out new methods and technologies to enliven her teaching.

Lewis says, “My students quickly came to see the value of GRIT; they began to engage and perform at a significantly higher level than I had seen before. I was frankly wowed by the results. I had the best retention ever for an online class. Five students never really engaged with the class and they quickly dropped. But the remaining students all completed the course and earned significantly higher grades than is typical. Students dug deep and worked hard on the assignments. Individually and as a group, students went above and beyond the syllabus requirements.”

“I have students in my spring Education courses who are now in their second term with GRIT, and I observe a clear difference from previous years. These students are invested in themselves. They are doing high quality work and setting expectations for themselves higher and higher.”

Results and data

• Data analysis showed correlations between higher GRIT scores and term GPA, cumulative GPA, and cumulative credits earned. This correlation supports LSC-T’s expectations that higher GRIT is associated with better performance and provides evidence to validate moving forward with the G3 initiative.

• Preliminary data show slightly higher rates of successful course completion among the “With GRIT” students than those in classes without additional GRIT instruction.
Correlation of GRIT score and cumulative credits

Figure 1. GRIT Scores are significantly associated with student cumulative credits (p<.0001).

Course success rates with and without GRIT

Figure 2. Students participating in a GRIT course had a higher success rate (3 percentage points) than those who took courses that did not include additional GRIT instruction.

- **Persistence**: Fall 2015 to Spring 2016 was 4.2 percentage points higher than Fall 2014 to Spring 2015.
- **Completion**: Fall 2015 was 4 percentage points higher than 2014.
- Individual educators who infused GRIT beyond the minimum requirements reported improvements in engagement, persistence, and achievement.
The Student experience

Sample student comments from Latoya Lewis’s online Student Success class:

• “Writing is really not my best skill, but I worked hard at it and re-read the assignment several times. I realized I had the heading and format wrong when I sent in my draft, but I corrected that.”

• “I actually realized during this assignment that I needed to start spending more time studying for my classes, and I adjusted my daily routines to incorporate that.”

• “GRIT helped me understand how to perform tasks and how to manage my time effectively and become a much better college student considering it is my first time back in school since I graduated in 2008.”

Conclusion

LSC-T administrators and faculty are satisfied with the preliminary results of their GRIT impact study.

Dr. Nutt says, “Results thus far confirm that GRIT is an important factor linked to student success and that GRIT can be grown, developed, and strengthened over time. I am particularly encouraged that individual faculty like Latoya Lewis are creating GRIT best practices that we can share to energize our teaching and empower students further. We are now seeking to build a GRIT culture institution-wide and to continue measuring results and refining our approach.”
Assistant Dean Thomas notes, “Based on results thus far, we are encouraging all of our instructors to infuse GRIT. We will share best practices to promote consistency, and we look forward to measuring the impact of GRIT in multiple classes and over time.”

He continues, “My advice for colleagues embarking on a GRIT initiative like ours is to talk through the process with everyone at the table — faculty, administrators, and staff. Meet educators where they are and be open to learning together. Many instructors are instinctively using aspects of GRIT methodology; help each other to recognize GRIT pedagogies and make them more explicit, more consistent, and more systematic. Share the data and best practices that demonstrate how GRIT correlates to success and how GRIT can be developed over time. Move incrementally, measure your progress, and celebrate your accomplishments as a community.”

**Next steps**

Dr. Nutt summarizes, “We began by infusing GRIT in the classroom and in a few select student success programs. Now we are considering how best to infuse GRIT across the college so that our academic pathways are fully aligned with student life outside of class. We want to challenge students at every touch point, from orientation to graduation, to find the optimum GRIT to impact their lives holistically. That’s how we anticipate fulfilling our mission to help students reach their career and life aspirations.”

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— Dr. Lee Ann Nutt
President